



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/892,317	06/26/2001	Gayle L. Noble	8045150/JAS	1942

7590

05/14/2004

MOSER, PATTERSON, & SHERIDAN, L.L.P
595 SHREWSBURY AVENUE, SUITE 100
SHREWSBURY, NJ 07702

EXAMINER

SORRELL, ERON J

ART UNIT	PAPER NUMBER
----------	--------------

2182

DATE MAILED: 05/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/892,317

Applicant(s)

NOBLE ET AL

Examiner

Eron J Sorrell

Art Unit

2182

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 February 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 20-39 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 20-39 is/are rejected.
- 7) ☒ Claim(s) 38 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 June 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date Z.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

DETAILED ACTION

Claim Objections

1. Claim 38 is objected to under 37 CFR 1.75 as being a substantial duplicate of claim 37. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 20, 23-27, 30-33, 36, and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kroeker et al. (U.S. Patent No. 6,073,232 hereinafter "Kroeker" in view of Reed et al. (U.S. Patent No. 6,209,070 hereinafter "Reed" and further in view of Park (U.S. Patent No. 6,195,217).

Art Unit: 2182

4. Referring to method claims 20,24,26,27,32, and apparatus claim 33, Kroeker teaches a storage device, comprising:

a signal-bearing media storing data (see item labeled 16 in figure 1);

a system for impressing a signal on the signal-bearing media (see item labeled 22 in figure 1);

an interface for interfacing with a host (see connection between hard drive 12 and host computer 14);

a controller for controlling the interface and the system, the controller including a processor coupled to code memory that stores a client interface program (see items labeled 18,20, and 24 in figure 1 and lines 24-29 of column 2) for causing the processor to:

create a host file structure comprised of data to be transferred to the host (see lines 30-65 of column 2);

confirm that the host is communicating with the storage device through the interface (see lines 63-67 of column 4; note this is carried out during the power on/reset routine);

Kroeker fails to teach the limitations of producing a files not transferred data structure comprised of data in the host file structure that has not been transferred;

Art Unit: 2182

transferring the data in the filed not transferred structure to the host;

updating the files not transferred data structure; and

continuing to transfer the data in the files not transferred structure until all of the data has been transferred or until the host is no longer communicating with the storage device.

Reed teaches, in an analogous apparatus, producing a files not transferred data structure comprised of data in the host file structure that has not been transferred (i.e. the difference between has to be transferred and what has been transferred) (see lines 53-67 of column 2);

transferring the data in the filed not transferred structure to the host (see lines 53-67 of column 2);

updating the files not transferred data structure (see lines 53-67 of column 2); and

continuing to transfer the data in the files not transferred structure until all of the data has been transferred or until the host is no longer communicating with the storage device (see lines 53-67 of column 2).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify the apparatus and method of Kroeker with the above teachings of Reed. One of ordinary skill in the art at the time of the applicant's

Art Unit: 2182

invention would have been motivated to make such modification in order to ensure all the data that is to be transferred to the host is transferred with any data being effected or overwritten as suggested by Reed (see lines 16-20 of column 3).

The combination of Kroeker and Reed fails to teach the apparatus and method comprise creating a file data structure comprised of data stored on the disk including producing a file allocation table.

Park teaches, in an analogous apparatus, creating a file data structure comprised of data stored on the disk including producing a file allocation table (see lines 29-53 pf column 2).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify the combination of Kroeker and Reed with the above teachings of Park. One of ordinary skill in the art at the time of the applicant's invention would have been motivated to make such modification in order to improve the access time of the disk drive as suggested by Park (see lines 32-38 of column 2).

5. Referring to method claims 23 and 31, Kroeker teaches the host comprises a computer (see item labeled 14 in figure 1).

Art Unit: 2182

6. Referring to claim 25, Kroeker teaches the method includes the step of aborting the transfer if the host is not communicating with the device (see lines 63-67 of column 4).

7. Referring to claim 30, Kroeker teaches the host device comprises a printer (see paragraph bridging columns 3 and 4).

8. Referring to apparatus claim 36, Kroeker teaches the signal-bearing media is a disk (see item labeled 16 in figure 1).

9. Referring to claim 37, Kroeker teaches the system for impressing a signal on the signal-bearing medium includes a read/write controller and a read/write head (see items labeled 20,22, and 24 in figure 1).

10. Claims 21,22,28,29,34, and 35 rejected under 35 U.S.C. 103(a) as being unpatentable over Kroeker in view of Reed in view of Park as applied to claims 20,27, and 33 above, and further in view of Glover (U.S. Patent No. 6,282,045).

11. Referring to method claims 21,22,28, and 29, and apparatus claims 34 and 35, the combination of Kroeker, Reed, and Park

Art Unit: 2182

fails to teach the transferring of data is performed using a USB or a 1394 interface.

Glover teaches a disk drive and a host transferring data using a USB or 1394 interface (see lines 38-46 of column 5).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify the combination of Kroeker, Reed, and Park with the above teachings of Glover. One of ordinary skill in the art at the time of the applicant's invention would have been motivated to make such modification in order take advantage of the high bandwidth both protocols support as suggested by Glover (see lines 38-46 of column 5).

Response to Arguments

12. Applicant's arguments with respect to claims 20, 27, and 33 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is

Art Unit: 2182

reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eron J Sorrell whose telephone number is 703 305-7800. The examiner can normally be reached on Monday-Friday 9:00AM - 5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey A Gaffin can be reached on 703 308-3301. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2182

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

EJS
May 12, 2004



JEFFREY GAFFIN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100